

## ISD Alarm Troubleshooting Summary

ISD Alarm Troubleshooting Summary				
Message	ISD Category	Light	Cause	Suggested Troubleshooting <sup>1</sup>
ISD VAPOR LEAKAGE WARN	Containment	Yellow	Containment system leaks at 2 times the TP-201.3 standard.	<ul style="list-style-type: none"> <li>Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a></li> <li>Exhibit 4</li> </ul>
ISD VAPOR LEAKAGE FAIL <sup>2</sup>	Containment	Red	8 <sup>th</sup> Consecutive Failure of Pressure Integrity (Vapor Leak) Test	
ISD GROSS PRESSURE WARN	Containment	Yellow	95 <sup>th</sup> percentile of 7-days' ullage pressure exceeds 1.3 IWC.	<ul style="list-style-type: none"> <li>Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a></li> <li>Exhibit 8</li> <li>Exhibit 9</li> </ul>
ISD GROSS PRESSURE FAIL <sup>2</sup>	Containment	Red	8 <sup>th</sup> Consecutive Failure of Gross Containment Pressure Test	
ISD DEGRD PRESSURE WARN	Containment	Yellow	75 <sup>th</sup> percentile of 30-days' ullage pressure exceeds 0.3 IWC.	
ISD DEGRD PRESSURE FAIL <sup>2</sup>	Containment	Red	31 <sup>st</sup> Consecutive Failure of Degradation Pressure Test	
FLOW COLLECT WARN	Collection	Yellow	Vapor collection flow performance is less than 50%.	<ul style="list-style-type: none"> <li>Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a>.</li> <li>Exhibit 5</li> <li>Exhibit 13</li> </ul>
FLOW COLLECT FAIL <sup>2</sup>	Collection	Red	2 <sup>nd</sup> Consecutive Failure of Vapor Collection Flow Performance Monitoring Test	
ISD VP STATUS WARN <sup>4</sup>	Processor	Yellow	Failure of Vapor Processor Effluent Emissions or Duty Cycle test.	<ul style="list-style-type: none"> <li>Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a>.</li> <li>VP Emission Test</li> <li>VP Duty Cycle Test</li> </ul>
ISD VP STATUS FAIL <sup>2,4</sup>	Processor	Red	2 <sup>nd</sup> Consecutive Failure of Vapor Processor Status test.	
ISD VP PRESSURE WARN <sup>4,5</sup>	Processor	Yellow	90 <sup>th</sup> percentile of 1 day ullage pressure exceeds 1 IWC <sup>4</sup> . 90 <sup>th</sup> percentile of 1 day ullage pressure exceeds 2.5 IWC <sup>5</sup> .	<ul style="list-style-type: none"> <li>Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a>.</li> <li>Exhibit 8</li> <li>Exhibit 9</li> </ul>
ISD VP PRESSURE FAIL <sup>2,4,5</sup>	Processor	Red	2 <sup>nd</sup> Consecutive Failure of Vapor Processor Overpressure Test	

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VP EMISSION WARN <sup>3,4</sup>	Processor	Yellow	Mass emission exceeded the certified threshold.	<ul style="list-style-type: none"><li>• Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a>.</li><li>• Exhibit 6</li><li>• Exhibit 9</li></ul>
VP EMISSION FAIL <sup>4</sup>	Processor	Red	2 <sup>nd</sup> Consecutive Mass emission test failure.	
VP DUTY CYCLE WARN <sup>3,4</sup>	Processor	Yellow	Duty cycle exceeds 18 hours per day Or 75% of 24 hours.	<ul style="list-style-type: none"><li>• Troubleshooting Guide found at <a href="http://www.vsthose.com">www.vsthose.com</a>.</li><li>• PMC Setup Procedure</li><li>• Exhibit 8</li><li>• Exhibit 9</li><li>• Exhibit 4</li></ul>
VP DUTY CYCLE FAIL <sup>4</sup>	Processor	Red	2 <sup>nd</sup> Consecutive Duty Cycle Test Failure.	
ISD SENSOR OUT WARN	Self-Test	Yellow	Failure of Sensor Self-Test	<ul style="list-style-type: none"><li>• Confirm ISD sensor &amp; module installation / communication per VR 204 IOM Section 16, Chapter 2</li></ul>
ISD SENSOR OUT FAIL	Self-Test	Red	8 <sup>th</sup> Consecutive Failure of Sensor Self-Test	
ISD SETUP WARN	Self-Test	Yellow	Failure of Setup Test	<ul style="list-style-type: none"><li>• Confirm EVR/ISD programming per VR 204 IOM Section 16</li></ul>
ISD SETUP FAIL <sup>2</sup>	Self-Test	Red	8 <sup>th</sup> Consecutive Failure of Setup Test	
<div><sup>1</sup>See ISD Troubleshooting Manual P/N 577013-819 and the VST ISD Troubleshooting Guide 9513-003 found at <a href="http://www.vsthose.com">www.vsthose.com</a> for a complete list of suggestions.</div> <div><sup>2</sup>ISD Site shut down alarms</div> <div><sup>3</sup><b>This warning will result in a ISD VP Status Warn</b></div> <div><sup>4</sup><b>VST ECS Membrane Processor.</b></div> <div><sup>5</sup><b>Veeder-Root Polisher</b></div>				